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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,073	07/03/2006	Mike Birkett	BIRK3003/REF	2722
23364 7590 06/13/2007 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			EXAMINER MACAULEY, SHERIDAN R.	
			ART UNIT 1609	PAPER NUMBER
			MAIL DATE 06/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,073

Applicant(s)

BIRKETT ET AL.

Examiner

Sheridan R. MacAuley

Art Unit

1609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/12/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-6 are pending and examined on the merits in this office action.

Claim Objections

1. Claims 1 and 3-6 are objected to because of the following informalities. It is recommended that the claims be amended as follows: The term "2-isopropyl-3-methoxy-pyrazine" should be replaced with the term "2-isopropyl-3-methoxy-pyrazine", or another appropriate spelling of the term. In independent claim 3, the word "A" should be inserted at the beginning of the claim. In dependent claims 4-6, the word "The" should be inserted at the beginning of each claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the applicant intends for the compound to be used "as a mole repellent".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Petersson (WO 1999/37152). Claim 1 recites a method of repelling a pest, which comprises administering to a pest a composition comprising 2-isopropyl-3-methoxypyrazine as a pest repellent. Claim 2 further limits claim 1 by reciting that the pest repellent is a mole repellent. Claim 3 recites a pest-repelling composition comprising 2-isopropyl-3-methoxypyrazine, and optionally combined with excipients. Claim 4 recites a mole-repelling composition according to claim 3.
6. Petersson et al. teach a compound comprising 2-isopropyl-3-methoxypyrazine and a method of administering the compound to an infested area (p. 4, lines 10-14, p. 6, line 28-p.7, line 2). Petersson et al. teach that the 2-isopropyl-3-methoxypyrazine is known to be used by insects to repel predators (p. 2, line 27-p. 3, line 9). Although the method of Petersson et al. does not specifically teach administering the compound as a pest repellent, the method of administering the compound to an infested area would have inherently have repelled any pests, specifically moles, in the vicinity of the infested area. Further, the method taught by Petersson et al. meets all of the limitations of claims 1 and 2, which recite only one active step, i.e. administering the composition to a pest.
7. Therefore, Petersson et al. anticipate all of the limitations of the cited claims.

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8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Leitner et al. (Chemie, Mikrobiologie, Technologie der Lebebsmittel, 1990, 12: 151-8, abstract only cited). Leitner et al. teaches compound comprising 2-isopropyl-3-methoxypyrazine and a method comprising administering the compound to a pest, *Sitophilus oryzae* (abstract). Note that Leitner et al. teaches the active steps of claims 1 and 2, i.e. administering the composition to a pest.

9. Therefore, Petersson et al. anticipate all of the limitations of the cited claims.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leitner et al. (Chemie, Mikrobiologie, Technologie der Lebensmittel, 1990, 12: 151-8, abstract only cited) in view of Dean et al. (WO 1985/05009). Claims 5 and 6 recite the repelling compositions according to claims 3 and 4, respectively, consisting of latex tubing impregnated with the compound 2-isopropyl-3-methoxypyrazine.

14. The teachings of Leitner et al. are discussed above. Leitner et al. do not teach a composition consisting of a latex tube impregnated with 2-isopropyl-3-methoxypyrazine.

15. Dean et al. teach a latex tube impregnated with a pesticide, specifically wormwood oil (p. 6, lines 10-19).

16. At the time of the invention, a pest-repelling composition comprising 2-isopropyl-3-methoxypyrazine was known, as taught by Leitner et al. It was further known that latex tubes impregnated with pesticides could be manufactured, as taught by Dean et al. Since both 2-isopropyl-3-methoxypyrazine and wormwood oil are known to be pesticides, and art recognized equivalents, one of ordinary skill in the art would have been motivated to substitute wormwood oil with 2-isopropyl-3-methoxypyrazine (see MPEP 2144.06). One would have a reasonable expectation of success in impregnating latex tubing with 2-isopropyl-3-methoxypyrazine because it is known in the art that latex

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may be impregnated with pesticides. It would therefore have been obvious to one of ordinary skill in the art to combine the teachings of the references discussed above to arrive at the claimed invention.

17. Thus, the claimed invention as a whole was *prima facie* obvious over the combined teachings of the prior art.

Information Disclosure Statement

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining

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compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).


Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan R. MacAuley whose telephone number is (571) 270-3056. The examiner can normally be reached on Mon-Thurs, 7:30AM-5:00PM EST, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mary Mosher can be reached on (571) 272-0906. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


MARY MOSHER
SUPERVISORY PATENT EXAMINER
6-11-07